

Media, PA – Congressman Sestak is pleased to announce the establishment of The 21st Century National Center for Cognition and Science Instruction in Conshohocken through a \$10 million grant from the U.S. Department of Education. The award was given to a consortium of three Pennsylvania universities, two nonprofit organizations, scores of middle schools and the Pennsylvania and Delaware Departments of Education to draw upon the advancements in the field of cognitive science - how the mind receives, processes, stores and retrieves information and knowledge - to develop and evaluate theoretically driven modifications to existing middle school science curricula to improve student learning. Schools from Delaware and Montgomery Counties will be among the at least 180 middle schools involved. — “I have long been a staunch advocate of promoting STEM education, and congratulate the 21st Century Partnership for STEM Education on their receipt of this impressive grant,” said Congressman Sestak, who is a member of the Congressional STEM caucus. “A child in an eighth grade math class has a 68 percent chance of having a teacher who has not majored or is not certified in mathematics; a child who is taking physical sciences in grades five to nine has a 95 percent chance of having a teacher who has not majored or is not certified in that subject. This is why STEM education is so important for our economic security, so that our children are not only educated for jobs in a more technically-oriented economy, but so that they also might become accredited teachers for the next generation of children.”

The 21st Century Partnership for STEM Education is composed of numerous higher- and primary-educational institutions, and will draw upon the strengths of the University of Pennsylvania’s Graduate School of Education and Institute for Research in Cognitive Science; Temple University’s Spatial Intelligence and Learning Center (SILC); and the University of Pittsburgh’s Learning Research and Development Center. Outreach and dissemination of research findings will be conducted by Research for Better Schools. The partnership aims to use the Center to develop and evaluate theoretically driven modifications to two existing middle school science curricula to improve student learning. The research team will apply theoretical principles of cognitive science and also develop teacher professional development materials and resources to support the use and teaching of the modified curricular resources. When all modifications have undergone the full cycle of small-scale piloting and one year of large scale testing, analysis and refinement, an efficacy trial will be conducted to evaluate the impact of these curriculum modifications on student learning.

The Congressman’s commitment to STEM education is evident in the fact that during the last federal appropriations process, Congressman Sestak successfully secured funding for STEM projects at both Cheyney University and the Delaware County Community College totaling more than 1.3 million dollars. This funding prepares our students not only to be the scientists, mathematicians and engineers of the future, but also to serve as teachers for younger generations. This necessarily bolsters our workforce development, as it provides local businesses with highly-trained young people who are able to meet their employment demands.

The Congressman has further addressed the topic of workforce development—especially as it relates to science and mathematics—in his establishment of his Higher Education and Workforce Development Advisory Committee and the Excellence in Community Education working group. Each is composed of subject-matter experts focused on curriculum development that will groom middle school students for competence in science, technology, engineering and other majors in college, and will prepare high school and college graduates to compete for high skill and high paying jobs when they have completed their education.

Born and raised in Delaware County, former 3-star Admiral Joe Sestak served in the Navy for 31 years and now serves as the Representative from the 7th District of Pennsylvania. He led a series of operational commands at sea, including Commander of an aircraft carrier battle group of 30 U.S. and allied ships with over 15,000 sailors and 100 aircraft that conducted operations in Afghanistan and Iraq. After 9/11, Joe was the first Director of "Deep Blue," the Navy's anti-terrorism unit that established strategic and operations policies for the "Global War on Terrorism." He served as President Clinton's Director for Defense Policy at the National Security Council in the White House, and holds a Ph.D. in Political Economy and Government from Harvard University. According to the office of the House Historian, Joe is the highest-ranking former military officer ever elected to the Congress.